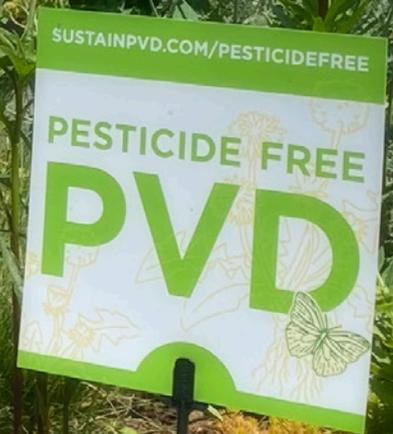


BRIGHT CITIES: Providence, RI

How Providence Quantified the Impact of Their Toxic Reduction Strategies



Providence Transitions to Chemical-Free Maintenance and Encourages Residents To Do the Same

Providence, Rhode Island thinks big when it comes to fostering healthier communities for all. Community and city leaders gained national recognition in 2019 with the launch of Providence's [Climate Justice Plan](#) that creates a vision for a low-carbon future that centers frontline communities closest to and most impacted by the climate crisis and other environmental injustices.

The city found that neighborhoods with the largest populations of people of color and lowest median household incomes are the ones that experience the highest rates of pollution, most severe health effects from environmental causes, and have the least amount of trees and green space.



Director of the Roger Williams Park Botanical Center Lee Ann Freitas talks about efforts like hand-pulling weeds, monitoring pest problems, and using low-toxicity sprays like neem to create a safe environment for people and nature alike with members of the New England Municipal Sustainability Directors Network.

BRIGHT CITY: PROVIDENCE, RI

CONCERNS:

- Pesticide exposures for kids
- Preemption laws prohibit pesticide use ban
- City purchases could inadvertently contribute to toxic exposures

PROJECT OUTPUT:

- Pesticide Free PVD campaign leads to 500,000 ft² of pesticide free turf
- Environmentally Preferable Purchasing Resolution passed
- Strategy defined to continue transitioning Providence parks to pesticide and chemical free management
- 100 residents pledge to go pesticide-free
- Efforts to integrate actions to reduce neurotoxic exposures into Providence's comprehensive plan and other planning documents

KIDS POTENTIALLY IMPACTED:

- More than 11,300 kids under 5 years old live in Providence

Healthy Babies Bright Futures' Bright Cities Program works with Cities to Protect Babies' Brain Development

The Bright Cities program gives grants up to \$35,000 to city governments and community-based partners to equitably reduce their community's exposures to neurotoxic chemicals that interfere with all babies' brain development.

Why? 1 in 6 children in America have a neurological disability including autism, IQ loss, learning or behavioral problems, attention deficit/hyperactivity disorder and speech or cognitive delays.¹ While toxic chemicals are not the sole cause for lifelong learning and developmental deficits, they are among the most preventable.

Bright Cities works with mayors and city leaders to design the most effective strategies for a city. Benefits to being a Bright City extend beyond reducing neurotoxic exposures. Being a Bright City elicits positive responses from city residents. It provides an opportunity to leverage national funding and set the stage for sustainable equitable change. And it provides a fresh opportunity for cities to ensure that all babies have equitable, just and healthy environments.

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In tandem with community-led and citywide initiatives, Providence staff were determined to *lead by example* in city-owned schools and facilities. They embarked on an internal audit to determine what actions the city could take to reduce pollution and foster healthy green spaces.

The first step in exploring toxic reduction strategies involved a candid conversation with two dynamic leaders within the Providence park system: Parks Superintendent Wendy Nilsson and Director of the Roger Williams Park Botanical Center Lee Ann Freitas.

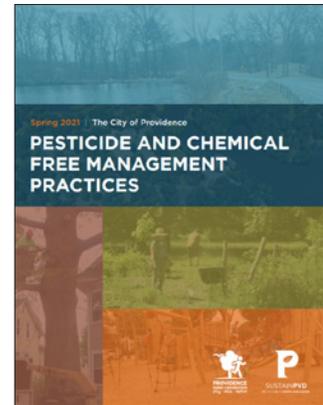
Wendy and Lee Ann had already established exemplary practices to minimize pesticide exposures by reducing—and in many cases, eliminating—the use of toxic chemicals. Building on this foundation, staff in Providence’s Office of Sustainability—with community partner Clean Water Action—crafted three avenues towards a chemical-free future:

1. Publish a strategic and well-documented report *Pesticide and Chemical Free Management Practices in Providence Parks* with a compilation of sustainable practices so that the Parks Department can institutionalize and expand their best management practices
2. Design and launch a public health education campaign called *Pesticide Free PVD*
3. Pass an environmentally preferable purchasing *resolution* and develop a citywide strategy

Pesticide and Chemical Free Management Practices in Providence Parks

Reducing the use of toxic chemicals in public spaces, increasing greenery in parks and on city streets, and maintaining safety standards in playground equipment are some examples of best management practices used to create and maintain healthy and safe public parks.

Providence’s report showcases the Providence Parks Department’s environmentally friendly urban park practices, emphasizing the chemical free work already underway and connecting the practices to health impacts. The final product provides a cohesive, useful format for current and future staff to understand existing policies and to build upon going forward.



“The Roger Williams Park Botanical Center is managed almost entirely chemical free. Managers of the facility release beneficial insects to control pests and use goats to graze weeds. Dozens of other city parks implemented modifications to reduce the use of chemically treated wood and rubber mulch (which can leach toxins) at playgrounds.

Bottom line—
Providence is doing really good stuff for babies and families!”

Samantha Kronyak, author of *Pesticide and Chemical Free Management Practices*



Pesticide Free PVD Framework

Providence’s online public health education campaign, [Pesticide Free PVD](#), was modeled after Bright City Salt Lake City’s [Pesticide Free SLC](#) campaign. **Other cities are free to use this framework for their own Pesticide Free campaigns!**

Since SLC’s campaign was designed to reduce pesticide use in the mountain west, the Providence team leaned heavily on local expertise—especially Lee Ann and Wendy—to tailor the content for New England’s climate. Native plants are adapted to local conditions and aren’t easily out-competed by unwanted plants. For Providence, the [Rhode Island Native Plant Guide](#) can be used to search for species indigenous to the state and find out where to purchase them.

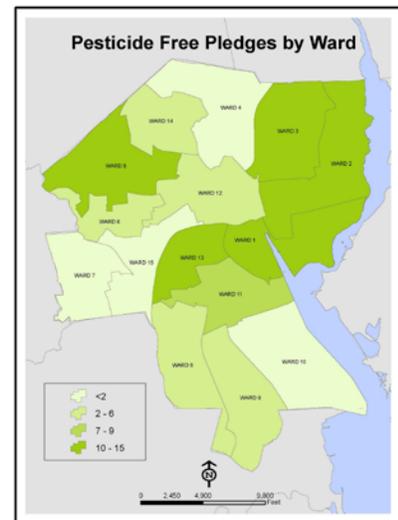
It was a big job to develop tailored content; a summer intern and graphic design support from Providence’s communications staff were instrumental in the development of the Pesticide Free PVD campaign. Prior to the launch on Earth Day, three steps formed the framework of the Pesticide Free PVD campaign.

- 1. Website content and design.** The website features a [wide variety of resources](#) — health impacts of pesticides, adopting pesticide free lawn care, best practices in Providence parks, 10 easy tips for residents, testimonials, and a simple pledge:

I pledge to maintain my lawn and garden without chemical pesticides and fertilizers.

Over 100 residents pledged to go pesticide free, resulting in 500,000 square feet (~11.5 acres) of private, primarily residential, land pledged managed without pesticides. Many residents learned about taking the pledge via public outreach at community events and by noticing the “Pesticide Free PVD” yard signs in neighborhoods.

Staff cleverly designed the [pledge form](#) to help residents accurately estimate land managed without chemical pesticides and fertilizers. After taking the pledge, residents were directed to look up their lot size using a link to Providence’s online assessment database. Clear instructions were provided to calculate the square footage maintained without chemical inputs. A “ward map” was also embedded in the pledge form so that residents could accurately share their location without providing a specific address.



- 2. Print signs and other collateral.** Materials printed included lawn signs for residents who took the pledge, handouts of [tips for a pesticide free lawn and garden](#), and banners for early institutional supporters. Finalizing the specifications² of these printing jobs took much longer than expected. The signs and banners proved, however, to be a highly effective way to generate momentum, build community, and collect testimonials about the health and environmental benefits of being pesticide free.

3. Establishing early supporters. City staff reached out to community development corporations, private apartment management companies, colleges, and managers of city parks and gardens, who were already reducing chemical use on their green space.

Leaders across the city shared their commitment to reducing and eliminating chemicals, including West Elmwood Housing Development Corporation, Providence College, Armory Management Company and Blackstone Parks Conservancy.

To make it easy for these groups to promote Pesticide Free PVD, each group received a “Pesticide Free PVD” banner and social media toolkit to share and promote their commitment. The early support of large institutions sent the message that “notable groups in the community have already made a commitment to going pesticide free,” which was instrumental in establishing a firm foundation for the Pesticide Free PVD campaign.



“Our children deserve to live in safe and vibrant communities that allow them to thrive. By partnering with Healthy Babies Bright Futures, we are ensuring that every child in Providence has the opportunity to realize their full potential.”

Mayor Jorge Elorza
Providence, Rhode Island



Director of the Roger Williams Park Botanical Center Lee Ann Freitas talks about efforts like hand-pulling weeds, monitoring pest problems, and using low-toxicity sprays like neem to create a safe environment for people and nature alike with members of the New England Municipal Sustainability Directors Network.

Continued Opportunities to Lead by Example

As sustainability staff learned more about where chemical exposures were likely occurring in Providence, staff continued to look inward for opportunities within the city's control to reduce toxic exposures. Joining many other US cities, staff took steps to use the city's purchasing power to both make safer purchases for employees and residents and to use market forces to encourage companies to shift to safer products.

Providence's Path Towards Environmentally Preferable Purchasing

Environmentally preferable purchasing (EPP) is the practice of making purchasing choices that minimize negative impacts on human health and the environment. Practically, EPP means purchasing products that are manufactured more sustainably (e.g., recycled content, reduced packaging, manufactured according to third-party environmental certifications), reduce greenhouse gas emissions (e.g., manufacturing gains and/or local purchasing), and reduce neurotoxic exposures (e.g., purchase furniture and carpets without flame retardant chemicals/VOCs, purchase foodware without PFAS, reduce pesticide use).

Providence City Council passed [a resolution calling for the adoption of an Environmentally Preferable Purchasing Policy](#) in January 2021. Adoption of an EPP policy supports the goals outlined in Providence's [Climate Justice Plan](#) to lead by example in city-owned schools and facilities, to create the conditions for healthy community spaces, and to build a local and regenerative, or circular, economy in Providence.

The Office of Sustainability and Purchasing Department surveyed city departments to gain a better understanding of existing purchasing and operational practices and opportunities for improvement. Two product categories—office supplies and cleaning supplies—were identified as “low-hanging fruit” where switching to certified greener products is expected to be easy, cost-neutral, and healthier for city staff.

In addition to continued support from Clean Water Action and HBBF, the [Sustainable Purchasing Leadership Council](#) will also offer coaching and technical support for Providence staff. These efforts are expected to culminate—in the short term—in the adoption of an environmentally preferable purchasing policy as an administrative policy, code, regulation or ordinance.

“The range of resources and technical support on environmentally preferable purchasing from Clean Water Action, HBBF, and other national leaders has helped better position our office to collaborate with and, in turn, support other departments in institutionalizing sustainability across city operations.”

Emily Koo,
Providence's
Director of
Sustainability



Providence Mayor Jorge O. Elorza celebrated Earth Day 2021 by launching the Pesticide Free PVD Campaign to eliminate harmful chemicals from gardens, lawns, and parks in the city.



PLAYBOOK TO ROLL OUT CHEMICAL-FREE STRATEGIES

1

Explore your city's existing practices to identify chemical reduction opportunities and project leaders.

A “lead by example” ethos is strong in Providence. Internal city evaluation, via brainstorming meetings with city staff and community leaders, identified an opportunity to help codify existing chemical free management practices. Recognizing existing environmentally preferable choices within the confines of budget, staffing and feasibility strategically set the stage for the phased roll out of a citywide environmentally preferable purchasing policy.

2

Launch a public education campaign to increase awareness and action.

Launched on Earth Day 2021, Pesticide Free PVD encourages community members, property owners, and businesses to eliminate the use of harmful chemicals like pesticides and fertilizers in lawns and gardens, as well as other toxins in the home. Early institutional support lent credibility to the campaign. Yard signs and banners raised campaign visibility and helped increase participation among residents. When staff attended in-person community events like farmers markets and summer fairs, more residents took the “Pesticide Free” pledge.

3

Link neurotoxic exposures to other environmental proposals.

A range of existing policy proposals to council sought environmental benefits, such as banning single-use plastics in city buildings. By understanding opportunities within the city's control to reduce toxic exposures, staff helped broaden existing proposals to create a more holistic environmentally preferable purchasing resolution (passed January 2021). Resources to help create EPPs are available: [Sustainable Procurement Policies Roadmap](#), [Sustainable Purchasing Leadership Council](#), and the [Center for Environmental Health](#) (and others).

4

Integrate successes across multiple city departments and planning documents.

Building from success within the Parks Department, sustainability staff launched a citywide survey to identify opportunities and share information about EPP. This initiated a trust-building process and ultimately two decisions. The first was to initiate environmentally preferable purchases citywide for office and cleaning supplies. The second was to review the integration of Providence's chemical reduction strategies and Providence's Climate Justice Plan into key strategic planning documents like the Comprehensive Plan and Providence's code of ordinances.

5

Share learning with other city leaders.

Providence's Office of Sustainability hosted a New England Municipal Sustainability Network meeting and presented the report, campaign, and EPP work to sustainability leaders from across New England. Gratitude came both from participants being “blown away” by Providence's examples and from the information exchanged. This networking spurred new ideas and encouraged collaboration—among New England Cities and with new Bright Cities grant recipients!

Have questions about Providence's actions?

Contact Emily Koo, Providence's Director of Sustainability at
ekoo@providenceri.gov

Curious about funding and/or informational resources?

Contact Kyra Naumoff Shields, Bright Cities Program Director, at
knaumoff@hbbf.org



The Bright Cities program provides grant funding for US cities and community based partner organizations to reduce exposures — in pregnant women and children under 2 years — to the nine neurotoxins with the strongest associations to developmental delay.¹ These neurotoxins are arsenic, flame retardants, lead, mercury, combustion byproducts called PAHs, banned industrial chemicals PCBs, organophosphate pesticides, a rocket fuel component and fertilizer contaminant called perchlorate, and plastic additives called phthalates.

ENDNOTES

- 1 Bennett D, Bellinger DC, Birnbaum LS, et al. Project TENDR: Targeting Environmental Neuro-Developmental Risks The TENDR Consensus Statement. *Environ Health Perspect.* 2016; 124(7):A118-A122.
- 2 Sign specifications: comparable to lawn chemical warning signs (16 pt cardstock for outdoor use, 8" x 8", double-sided color) and not thicker political yard signs such as coroplast. Proved to be weatherproof, except in the heaviest of wind or rainstorms.
- 3 EPA's "Pesticide Industry Sales and Usage 2008-2012 Estimates"
- 4 National Research Council, *Pesticides in the Diets of Infants and Children*, National Academy Press, Washington, D.C., 1993, pp. 4, 23–24, 325–326.